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(54) **SYSTEM AND METHOD FOR ENHANCED ROUTING AND RESERVATION PROTOCOL**

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(57) **ABSTRACT**

A network node and a method of dynamically reconfiguring routes of established connections in a communications system operate to provide the optimal path for a new connection based on a priority status of the new connection. The optimal path is provided even when a communication link on the optimal path does not have a sufficient amount of available bandwidth to accommodate the new connection. The network node operates in conjunction with other network nodes in the system to reroute one or more established connections that have reserved bandwidth on a communication link on the optimal route and have a lower priority status than the new connection, thereby increasing the available bandwidth on the communication link to accommodate the new connection. The network node also performs conventional functions of a router. The network node and the method can be implemented in any communications system where information is transmitted in packets, blocks, frames or cells. The network node includes a reroute-signal generator, a network monitor and a reservation unit that operate with a CPU of the node to perform the rerouting operation.

11 Claims, 5 Drawing Sheets